

BANNIKOV, Yu.I., inzh.

Electrostatic stresses in the moist insulation of electric
power transformers. Elek. sta. 31 no.8:57-59 Ag '60.
(MIRA 14:9)

(Electric transformers)

BANNIKOV, Yu.I., inzh.

Intermittent method for drying power transformers. Izv.vys.ucheb.
zav.; energ. 4 no.9:10-14 S '61. (MIRA 14:10)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii
sel'skogo khozyaystva. Predstavlena kafedroy proizvodstva i
raspredeleniya elektroenergii v sel'skom khozyaystve.
(Electric transformers—Drying)

PUCHKOVSKIY, V.V., kand.tekhn.nauk; BANNIKOV, Yu.I., inzh.

Use of model power transformers with moist insulation for studying
voltage redistribution. Elek.sta. 33 no.1:55-57 Ja '62.(MIRA 15:3)
(Electric transformers)

BANNIKOV, Yu. I., inzh.

Experimental study of the electric field in the heating of wet insulation. Izv.vys.ucheb.zav.; energ. 7 no. 4:30-34 Ap '64.
(MIRA 17:5)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva. Predstavlena kafedroy raspredeleniya proizvodstva i raspredeleniya elektroenergii v sel'skom khozyaystve.

POFOV, Ye.P., inzh.; PYASTOLOV, A.A., kand. tekhn. nauk, docent;
BANNIKOV, Yu.I., inzh.

Study of the drying of single-phase OMS transformers using
a zero sequence circuit. Izv. vys. ucheb. zav.; energ. 7 no.11:
16-22 N '64 (MIRA 18:1)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii
sel'skogo khozyaystva. Predstavlena kafedroy proizvodstva i
raspredeleniya elektroenergii v sel'skom khozyaystve.

BANNIKOV, Yu.I., kand.tekhn.nauk; POPOV, Ye.F., inzh.

Drying of an OMS transformer using single-phase current. Energetik
no.9:36-38 S '64. (MIRA 17:10)

(2)
Production of charcoal from industrial by-products

According to the data of the USSR Ministry of Chemical Industry, the production of charcoal (II) can be obtained from various sources (cottonseed and sunflower seed hulls, corn husks, sawdust, lignite) by treatment with concentrated sulfuric acid. The yield of II depends on the nature and amount of the starting material. The yield of the dehydration reaction is the highest for cottonseed hulls and sunflower seed hulls.

The yield of the reaction is also high for corn husks and sawdust. The yield of the reaction is low for lignite.

The yield of the reaction is also high for cottonseed hulls and sunflower seed hulls. The yield of the reaction is low for lignite.

LEBEDEV, N.V.; LYUBIN, B.O.; BANNIKOVA, A.A.

Yield of crystallized glucose in the decomposition of a
binary compound of glucose and sodium chloride. Gidroliz. i
lesokhim.prom. 11 no.7:3-5 '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidroliznoy i
sul'fitnospirtovoy promyshlennosti.
(Glucose) (Crystallization)

BANNIKOVA, A. A. (NIIS)

"Effect of soluble hemicellulose monosaccharides on the system glucose-sodium chloride-water"

Report presented at the Conference on the Theory and Technology of Crystalline Glucose Production, Leningrad, March 1961 (Reported in Gidrol i lisokhim, 4, 1961)

LEBEDEV, N.V.; BANNIKOVA, A.A.

Higher yields of crystalline glucose during the degradation of a
double compound of glucose and sodium chloride. Sbor.trud. NIIGS
11:58-65 '63. (MIRA 16:12)

BANNIKOVA, I.A.

Role of forest litter in the development of herbaceous soil cover
in some types of forests of the Serebryanyy Bor Tract. Biul. MOIP.
Otd. biol. 68 no.1:79-102 Ja-F '63. (MIRA 17:4)

ИЗДАНИЕ, Анатолий Иванович; ИЗДАНИЕ, М.В., etc. ред.: АННОТАЦИЯ
Л.А., ред.

[Forests in central Yakutia] Lesa Tsentral'noi Yakutii.
Moskva, Nauka, 1965. 206 p. (MIRA 18:11)

SUKACHEV, V.N., akademik, ctv. red.; BANNIKOVA, I.A., red.

[Forests of the Moscow area; materials on biogeocenological studies] Lesa Podmoskov'ia; materialy k biogeotsenoticheskomu izucheniiu. Moskva, Nauka, 1965. 209 p.
(MIRA 19:1)

1. Akademiya nauk SSSR. Laboratoriya lesovedeniya.

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
COMMON ELEMENTS																										COMMON ELEMENTS																									
<p>BANNIKOVA, L. A.</p> <p>CA</p> <p>PROCESSES AND PROPERTIES INDEX</p> <p>The preparation of starters and their investigation in the production of butter. M. R. Hilschman and L. A. Bannikova. <i>Izvestiya Akademiya Nauk SSSR, Khim. i Tekhn. Masla, Trudy NIM</i> 1939, No. 6, 89-90; <i>Khim. Referat, Zhur.</i> 1940, No. 8, 41-2. --The organisms sepd. were not only energetic acid formers, but formed also simultaneously the whole complex of aromatic substances (volatile acids, acetoin, biacetyl, alc. and esters), i. e., they were organisms intermediate between <i>Str. lactis</i> and <i>Str. citrovorus</i>. Optimum results with respect to taste, odor and keeping qualities were obtained from starters combined from energetic acid formers and <i>Str. citrovorus</i>. Good starters were also obtained by adding cultures with "transient properties" to this combination. W. R. H.</p> <p>12</p>																																																			
<p>ASH, S. L. A. METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
3RD AND 4TH ORDERS																										3RD AND 4TH ORDERS																									
3RD AND 4TH ORDERS																										3RD AND 4TH ORDERS																									

1ST AND 2ND CODES		PROCESSES AND PROPERTIES INDEX	3RD AND 4TH CODES
BANNIKOVA, L. A.		<p>The selection of ferments for butter production. M. R. Hishman and L. A. Bannikova. <i>Microbiology</i> (U. S. S. R.) 8, No. 5, 586-603 (1968); <i>Khim. Referat. Zhur.</i> 1969, No. 12, 39.—The biochem. properties of 460 cultures of sour-milk streptococci sepd. from various milk products were investigated. Some streptococci combined the properties of energetic acid- and aroma-forming substances. However, the instability of these properties did not permit replacing the combination ferments in butter production by the newly obtained cultures. W. R. H.</p>	2
ca			
Dairy Sci. Res. Inst, Pushkin			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			
FROM SYNONYM	SECOND MAP ONLY ONE	RELISTONE	FROM SYNONYM
147085 42	147085 42	147085 42	147085 42

BANNIKOVA, L. A.		PROCESSES AND PROPERTIES INDEX	
<p>The influence of different methods of drying and storage of cultures on the properties of lactic acid streptococci. M. R. Hlibahman, L. A. Bannikova and E. Der'abina. <i>Malochnaya Prom.</i> 7, No. 8, 5-9(1940); <i>Chem. Zentr.</i> 1941, II, 1158-9; cf. <i>C. A.</i> 34, 4820; 36, 6085. The properties of lactic acid streptococci are altered during the drying of cultures. With <i>Str. paracitrovorus</i> 118, the formation of volatile oils was reduced from 24.2 (distn. no.) to 12.5-15.6; with <i>Str. paracitrovorus</i> 18 the same value was reduced from 20.8 to 0.0. All cultures were more active as regards acid formation after drying than before; the same was true regarding the formation of acetoin, etc., ether and CO₂. Strains isolated from the culture <i>Str. cremoris</i> UW 3/34 acquired the ability to ferment sucrose, maltose and dextrin after drying; the ability to ferment sucrose, however, was lost after 2 months' storage at -10°. The properties of the cultures (as the ability to ferment carbohydrates, etc.) could also be altered by the addn. of CaCl₂ or rennet to the milk. The best method of drying (from the standpoint of the no. of cells remaining alive) was drying for 60-90 min. at 40° in a vacuum drying oven.</p> <p>M. G. Moore</p>		11c	
ASB-55A DETALLURGICAL LITERATURE CLASSIFICATION			
RECORD #		183083 HIF ONV ONE	
183083 HIF ONV ONE		183083 HIF ONV ONE	

BANNIKOVA, L. A.

"Preparation of Dry Cultures of Lactic Acid Bacteria by Means of a Spray Drier".

Tr. Vses. N. -I. In-ta Moloch. Prom-sti, No. 15, pp 39-56

The spray method of preparation of dry cultures of lactic acid bacteria permits the obtaining of high-quality leavens for the milk industry. The increase in the content of dry substances in fat-free milk, the neutralization of leavens to drying, and the addition of sodium citrate permit a considerable increase in the quantity of cells in the dry culture and contribute to a longer-lasting retention of its activity. The addition of a sterile starch (in a proportion of 1:1) to the dry culture reduces its moisture content, improves friability, and contributes to better preservation of lactic acid streptococci. In the preservation of the dry culture (without neutralization) in an atmosphere of nitrogen, slower drying out of the lactic acid streptococci than in preservation in air was observed. A dry culture retained activity when kept at a negative temperature (-25°) over a period of 8 to 12 months. This gives the possibility of preserving developed dry cultures for application in the spring and summer periods when cases of decrease in activity of leavens are observed. Consequently, an evaluation of dry cultures which have been prepared by the spray and sublimation methods shows their identical quality. (RZhBiol, No. 10, 1955)

SO: Sum No 884, 9 Apr 1956

USSR/Microbiology - Industrial Microbiology.

F-3

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67173

Author : Bogdanov, V., Bannikova, L.

Inst : -

Title : The Selection of Lactobacilli for the Preparation of Sour-Milk Products.

Orig Pub : Molochn. prom-st', 1957, No 10, 31-32

Abstract : Certain strains of *Bacterium bulgaricum* and *Bact. acidophilum* and lactic streptococci possess equal antibiotic activity in respect to gram-positive test organisms. In respect to gram-negative bacteria, the streptococci are, as a rule, less active. Similar results were obtained when streptococci were tested for resistance to phenol. The authors criticize a present concept as to an application for therapeutic purposes the acidophylic rods only and suggest to use instead a combination of acidophylic rods and antibiotically active strains of acidophylic streptococci.

Card 1/1

COUNTRY : USSR
CATEGORY :
ABS. JOUR. : RZhMol., No. 3 1959, No. 10121
AUTHOR : Bannikova, L. A.
INST. : ---
TITLE : A New Method of Producing Bacterial Ferments

ORIG. PUB. : Dokl. Vses. konferentsii po molochn. delu. M.,
Sel'khozgiz, 1958, 361-365
ABSTRACT : The production technology of dry ferments has been
developed (with the use of a spraying method of
drying) as tablets for the preparation of clotted milk
under home conditions. A routine for keeping the dry
ferments has been established.

Card: 1/1

33

BANNIKOVA, L.A., kand.sel'skokhoz.nauk; PYATNITSYNA, I.N., mladshiy
nauchnyy sotrudnik.

Selection of microorganisms for medicinal sour milk. Trudy
VNIMI [Mol.] no.20:84-95 '59. (MIRA 13:10)
(Milk, Fermented) (Bacteriology--Cultures and culture media)

SHTAL'BERG, S.M., kand.tekhn.nauk; BANNIKOVA, L.A., kand.sel'skokhoz.
nauk

Development of the technology of dry dietetic sour milk. Trudy
VNIMI [Mol.] no.20:96-102 '59. (MIRA 13:10)
(Milk, Fermented)

BAHNIKOVA, Lyudmila Aleksandrovna, kand. sel'khoz. nauk;
PYATNITSKAYA, Irina Nikolayevna, st. nauchn. sotf.;
ZHAROVA, V.S., retsenzent; KULESHOVA, V.D., retsenzent;
TIKHONOVA, T.V., red.

[Rapid methods of bacteriological analysis of milk and
dairy products] Uskorennye metody bakteriologicheskogo
kontrolia moloka i molochnykh produktov. Moskva, Fi-
shchevaia promyshlennost', 1965. 36 p.
· (MIRA 18:6)

L 56500-55 EWP(e)/EPA(s)-2/EWT(m)/EPP(c)/EWP(1)/EPR/EPA(w)-2/EPA(bb)-2/EWP(b)
 ACCR SIGN UP 15/01/822 Pab-10/Pr-4/Ps-4/Pt-7 UP/0286/65/000/011/0254/0014
 15/01/822

AUTHOR: Smirnova, P. I.; Smirnova, P. I.

SOURCE: Smirnova, P. I.; Smirnova, P. I.; Smirnova, P. I.; Smirnova, P. I.

TOPIC TAGS: luminescence, phosphorescent material, caustic potash, silicon dioxide

ABSTRACT: This Author's Certificate introduces a method for producing a phosphorescent material by applying luminescent coatings. The method involves the use of a caustic potash solution and a silicon dioxide coating.

15/01/822

15/01/822

15/01/822

15/01/822

15/01/822

Cord 15/01/822

BANNIKOVA, N. A.

BANNIKOVA, N. A.: "On the role of the central nervous system in regulating the process of absorption in the small intestine". Leningrad, 1955. Inst of Experimental Medicine, Acad Med Sci USSR. (Dissertation for the Degree of Candidate of MEDICAL Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955

SSR / Human and Animal Physiology (Normal and Pathological Digestion).

Abs Jour
Author
Inst
Title

: Ref Zhur - Biologiya, No 13, 1958, No. 60477
: Bannikova, N. A.
: Not given
: Effect of the Act of Eating Upon the Absorption of Glucose and Chlorides in the Small Intestine

Orig Pub : Fiziol. zh. SSSR, 1957, 43, No 12, 1176-1182

Abstract : In dogs with a chronic fistula of the upper part of the jejunum after Tiri-Vella, the act of eating produced a two-phase change of absorption, in the small intestine, of glucose and chloride solution introduced into the isolated loop. During the first phase, the absorption dropped for 1 - 5 minutes; during the second it increased for a prolonged period of time. When the loop was wetted by a solution (1:1000) of atropine, the two-phase reaction

92

2/2
BANNIKOVA, N.A.

Complex reflex nature of absorption reaction during the act of
eating. Fiziol. zhur. 45 no.5:569-576 My '59. (MIRA 12:7)

BANNIKOVA, N.A.

Significance of the level of alimentary excitability for the formation of the reflex reaction of absorption during the act of eating. *Fiziol.zhur.* 45 no.8:976-981 Ag '59.

(NIEA 12:11)

1. From the Department of General Physiology, Institute of Experimental Medicine, Leningrad.

(CENTRAL NERVOUS SYSTEM, physiology)

(GASTROINTESTINAL SYSTEM, physiology)

(FOOD, effects)

BANNIKOVA, N.A.

Reflex changes in the vessels of the mucous membrane of the small intestine and in the activity of the villi during the process of absorption. Fiziol. zhur. 48 no.3:324-330 Mr '60. (MIRA 15:4)

1. From K.M.Bykov's Department of General Physiology, Institute of Experimental Medicine, Leningrad.

(INTESTINES) (ABSORPTION (PHYSIOLOGY))
(REFLEXES)

BANNIKOVA, N.A.

Reflex changes in glucose absorption, the activity of villi and the state of vessels in the small intestine following stimulation of the mechanoreceptors of the gastrointestinal system. Fiziol.shur. 50 no.1:95-101 Ja '64. (MIRA 18:1)

1. Otdel obshchey fiziologii imeni akademika K.M.Bykova Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.

BANNIKOVA, R.V.

BANNIKOVA, R.V.: "Organization and methods of extending dispensary aid to the population. (Based on dispensary experience in Volosov Rayon, Leningrad Oblast)". Min Health RSFSR. Leningrad Sanitary-Hygienic Medical Inst. (Dissertations for the Degree of Candidate of Medical Sciences).

SO: Knizhnaya letopis' No 45, 5 November 1955. Moscow.

BANNIKOVA, R.V., kand.med.nauk

Evaluation of the results of preventive medical examinations in
dispensary care of the rural population. Zdrav.Ros.Feder. 4
no.1:23-24 Ja '60. (MIRA 13:5)

1. Iz kafedry organizatsii sdravookhraneniya (zav. - kand.med.
nauk R.V. Bannikova) Arkhangel'skogo meditsinskogo instituta.
(VOLOSOVA DISTRICT (LENINGRAD PROVINCE)--MEDICAL SCREENING)

BANNIKOVA, R.V., kand.med.nauk; PIEKHANOVA, K.A.

Investigating and reducing the incidence of disease with temporary disability among lumber mill workers. Zdrav. Ros. Feder. 4 no. 10:17-20 0 '60. (MIRA 13:10)

1. Iz kafedry organizatsii zdravookhraneniya (zav. - kand.med. nauk R.V. Bannikova) Arkhangel'skogo meditsinskogo instituta i Arkhangel'skoy gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach Ye.I. Kruglova).
(ARCHANGEL PROVINCE--LUMBERMEN--DISEASES AND HYGIENE)

PONOMAREV, A.N.; BANNIKOVA, V.A.

Studying nectar productivity as related to the biology of the
flower. Uch. zap. Perm. gos. un. 13 no.1:3-11 '60.
(MIRA 14:11)

(Siberia, Western—Honey plants)

BANNIKOVA, V.A.

Step-by-step flowering of rye. Nauch. dokl. vys. shkoly; biol.
nauki no. 2:107-110 '64. (MIRA 17:5)

1. Rekomendovana kafedroy sistematiki i morfologii rasteniy
Permskogo gosudarstvennogo universiteta im. A.M.Gor'kogo.

RERUN
OF
STAPLED ONE

USSR / Human and Animal Physiology (Normal and Pathological).
Digestion.

T

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60477

Author : Bannikova, N. A.

Inst : Not given

Title : Effect of the Act of Eating Upon the Absorption of
Glucose and Chlorides in the Small Intestine

Orig Pub : Fiziol. zh. SSSR, 1957, 43, No 12, 1176-1182

Abstract : In dogs with a chronic fistula of the upper part of the
jejunum after Tiri-Vella, the act of eating produced a
two-phase change of absorption, in the small intestine,
of glucose and chloride solution introduced into the
isolated loop. During the first phase, the absorption
dropped for 1 - 5 minutes; during the second it increased
for a prolonged period of time. When the loop was wetted
by a solution (1:1000) of atropine, the two-phase reaction

Card 1/2

USSR / Human and Animal Physiology (Normal and Pathological).
Digestion.

T

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60477

in the absorption change in connection with the eating
act disappeared. The reflector mechanism of absorption
change occurs with the aid of the parasympathetic
nervous system.

Card 2/2

REEL # 34

BANACH, A.
to

8+

RERUN
OF
STAPLED ONE
(DISREGARD REEL #)

BANNIKOVA, V.A.

Opening of flowers and the lengthening of the stamen filaments
in Gramineae. Bot. zhur. 49 no.5:735-739 My '64.

(MIRA 17:8)

1. Permskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.

RANNIKOVA, V. I., AVILOVA, YE. A.

"Experience of hygienic evaluation of prophylactic nutrition of
workers in the chemical industry."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

BANNIKOVA, V.P., kand.biologicheskikh nauk

Improve the viability of remote hybrids of preliminary inter-
varietal hybridization. Agrobiologiya no.2:296-298 Mr-Apr '61.
(MIRA 14:3)

1. Belorusskiy gosudarstvennyy universitet imeni V. I. Lenina,
Minsk.

(Wheat breeding) (Hybridization, Vegetable)

BANNIKOVA, V.P.

Some methods of overcoming the inviability of remote wheat hybrids.
Ukr. bot. zhur. 20 no. 5:12-19 '63. (MIRA 17:5)

1. Institut botaniki AN UkrSSR, otdel tsitologii i embriologii.

BANNIKOVA, V.P.; OSTAPENKO, Ye.^K. [Ostapenko, O.K.]

Some characteristics of the embryogenesis of the Kiznelevka variety of makhorka (*Nicotiana rustica* L.). Ukr. bot. zhur. 21 no.3:20-26 1964 (MIRA 17:7)

1. Institut botaniki AN UkrSSR, otdel tsitologii i embriologii.

BANNIKOVA, V.P.

Effect of preliminary intervarietal hybridization on the compatibility of durum wheat and soft wheat. Izv. AN SSSR. Ser. biol. 29 no. 1:151-158 Ja-F '64. (MIRA 17:3)

1. Belorusskiy gosudarstvennyy universitet i Institut botaniki AN UkrSSSR, otdel tsitologii i embriologii.

BANNIKOVA, V.P.

Cytoembryology of distant hybrids. Report No.2: Disturbances in the fertilization process during the crossing of *Nicotiana glutinosa* L. (♀) with *Nicotiana rustica* L. (♂). Ukr. bot. zhur. 22 no.2:40-46 '65. (MIRA 18:4)

1. Institut botaniki AN UkrSSR, otdel tsitologii i embriologii.

BANNOV, A.G.

History of the problem of metal osteosynthesis in sequelae of gunshot fractures. Ort. travm. i protez. 23 no.10:74-76 O '62.
(MIRA 17:10)

1. Iz khirurgicheskogo otdeleniya bol'nitsy (glavnyy vrach - L.M. Kondrat'yeva) shakhty "TSentral'naya Bokovskaya" Luganskoy oblasti i kafedry ortopedii i travmatologii (zav.- dotsent B.S. Gavrilenko) Zaporozhskogo instituta usovershenstvovaniya vrachey imeni M. Gor'kogo. Adres avtora: Luganskaya oblast', Bokovo-Antratsitovskiy rayon, bol'nitsa shakhty "TSentral'naya Bokovskaya."

BANNOV, A.T.

BANNOV, A.T.; SHNEYERSON, A.G.

How scab was eliminated from sheep in Krasnoyarsk Territory.
Veterinariia 34 no.9:43-46 S '57. (MLRA 10:9)

1. Nachal'nik vetotdela Krasnoyarskogo krayssel'khozupravleniya (for Bannov).
2. Starshiy nauchnyy sotrudnik Krasnoyarskoy nauchno-issledovatel'skoy veterinarynoy stantsii.
(Krasnoyarsk Territory--Scab disease in sheep)

BANNOV, A.T.; OKUNTSOV, I.V., kand.veter.nauk

Early spring farrowing in small movable huts is a measure for
ridding swine of plague. Veterinariia 37 no.1:27-29 Ja '60.

(MIRA 16:6)

1. Nachal'nik veterinarnogo otdela Krasnoyarskogo krayevogo
sel'skokhozyaystvennogo upravleniya (for Bannov). 2. Sibirskiy
nauchno-issledovatel'skiy veterinarnyy institut (for Okuntsov).
(Swine plague) (Swine houses and equipment)

BANNOV, A. T.

"The Veterinary Service of Krasnoyarsk Krai struggling for the rise of animal husbandry."

Veterinariya, Vol. 38, No 5, 1961

Bannov, A. T. - Krasnoyarsk NIVS

BANNOV, A.T.

Ways for the elimination of foot-and-mouth epizootics in
Krasnoyarsk Territory. Veterinariia 38 no.8:18-20 Ag '61
(MIRA 18:1)

1. Krasnoyarskaya nauchno-issledovatel'skaya veterinarnaya
stantsiya.

ASHEPA, M.B.; BANNOV, A.T.

Elimination of foot-and-mouth disease in winter. Veterinariia
41 no.5:38-39 My '64. (MIRA 18:3)

1. Krasnoyarskoye drayevoye upravleniye proizvodstva i zagotovok
sel'skokhozyaystvennykh produktov.

TERNOVOT, V.I. (Krasnodarskiy kray); BAIKOV, A.T. (Krasnodarskiy kray)

Practices in protecting animals from bloodsucking insects.
Veterinariia 42 no.9:95-96 S '65.

(MIRA 18:11)

BANNOV, K.; ABUZYAROV, Z., starshiy nauchnyy sotrudnik

Navigating vessels along recommended routes with the consideration of the predicted hydrometeorological conditions. Mor. flot 25 no.11:14-16 N '65. (MIRA 18:11)

1. Nachal'nik otdela sudovozhdeniya Glavnogo upravleniya moreplavaniya Ministerstva morskogo flota (for Bannov).
2. Tsentral'nyy institut prognozov (for Abuzyarov).

Bannov, Semen Yegorovich

PHASE I BOOK EXPLOITATION

236

Bannov, Semen Yegorovich

Remont elektrooborudovaniya metallurgicheskikh zavodov (Maintenance and Repair of Electrical Equipment in Metallurgical Plants) Moscow, Metallurgizdat, 1957. 504 p. 7,200 copies printed.

Ed.: Fibikh, V.V.; Ed. of Publishing House: Bagin, A.A.; Tech. Ed.: Attopovich, M.K.

PURPOSE: This book is intended for foremen and highly skilled workers who are concerned with repair and maintenance of electrical motors and lifting magnets. It may also be useful to students in technical schools specializing in electrical repair and maintenance.

COVERAGE: The book reviews problems of organization and technology of repair and maintenance of electrical motors and lifting magnets in metallurgical plants. This review is based on the experience of leading electrical repair shops in the metallurgical industry and also on achievements in technical maintenance in other branches of the industry. Engineer R. Kh. Khisamutdinov (deceased) is credited

Card 1/8

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.) 236

with major contributions in the field. The text notes that a large modern metallurgical plant has from 10,000 to 20,000 pieces of electrical equipment ranging in power from 0.05 kw to 10,000 kw. The number of electrical machines of various types at such plants exceeds 200; high-voltage (150,000 v) equipment and large numbers of transformers with capacities reaching 30,000 kw are also found. There are 15 Soviet references.

TABLE OF CONTENTS:

Introduction	7
Part I. Organization of Electrical Equipment Maintenance and Repair in Metallurgical Plants	11
Ch. I. Repair and Maintenance Systems	11
Ch. II. Methods of Organizing Maintenance and Repair	12
Ch. III. Classification of Planned-Preventive Maintenance	14
Ch. IV. Organization and Make-up of Electrical Maintenance Services in a Plant	17

Card 2/8

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.)	236
Ch. V. Planning of Electrical Equipment Repair	22
Part II. Structure and Organization of an Electrical Repair Shop	27
Ch. I. Make-up and Tasks of Services	27
Ch. II. Planning of Accomodation and Equipment for an Electrical Repair Shop	32
Ch. III. Control Structure and Staff of an Electrical Repair Shop	42
Part III. Organizational and Technical Groundwork for Electrical Repair-Shop Services	47
Ch. I, Organizing Technical Groundwork for Electrical Repair-Shop Services	47
Ch. II. Receipt and Processing of Orders	48
Ch. III. Technical Processing of Orders and Supply of Materials and Equipment for Maintenance	49
Card 3/8	

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.)	236
Ch. IV. Electrical Maintenance Shop Work	50
Ch. V. Delivery of Electrical Equipment for Repair	56
Part IV. Maintenance and Repair of Electrical Machinery up to 1000 kw Capacity	58
Ch. I. General Questions on the Organization of Repairs of Electrical Machinery	56
Ch. II. Types of Work Making up the Process of Electrical Machinery Repair	65
Ch. III. Technology of Disassembly Operations	68
Ch. IV. Determining Condition of Parts and Specifying Nature of Repairs	90
Ch. V. Repair of Commutators	100
Ch. VI. An Example of Technology in Repair of Commutators up to 500 mm Diameter	114
Ch. VII. Repair of Contact Rings	120
Ch. VIII. Repair of Cores	128
Ch. IX. Repair and Fabrication of Shafts	137
Card 4/8	

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.) 236

Ch. X.	Repair of Bearings	153
Ch. XI.	Maintenance and Improvement of Bearing Seals	174
Ch. XII.	Repair and Fabrication of Ventilators	179
Ch. XIV.	Repair of Housings	191
Ch. XV.	Technology of Assembly Operations	196
Part V.	Technology of Repairing Electrical Machinery Windings	217
Ch. I.	General Problems of Winding Repair	217
Ch. II.	Technology of Winding Repair	236
Part VI.	Technology of Impregnating and Drying Work	306
Ch. I.	Drying Processes and Dryers	306
Ch. II.	Impregnating Processes and Equipment	323
Ch. III.	Varnishing and Drying Work	338
Ch. IV.	Control of Impregnation and Drying Work	345

Card 5/8

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.)	236
Ch. V. Impregnating Electrical Insulating Materials and Parts Made of Wood	347
Part VII. Maintenance Repair of Large Electrical Machinery and Installations	349
Ch. I. Special Features in Organization of Repair of Large Electrical Machinery and Installations	349
Ch. II. Organization of Preparatory Work and Repair Technology of Large Electrical Machinery	355
Ch. III. Repair Work Carried Out Prior to Disassembly of Electrical Machinery	362
Ch. IV. Special Technological Features of Processing Commutators and Contact Rings	363
Ch. V. Special Technological Features of Disassembling Operations	369
Ch. VI. Cleaning and Washing of Windings	379
Ch. VII. Restoration of Varnish Coating on Windings	383
Ch. VIII. Repair of Mechanical Parts	385
Card 6/8	

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.)	236
Ch. IX. Special Organizational Features During Repair of Large Electrical Machinery	386
Ch. X. Sequence and Special Features in Assembly of Large Electrical Machinery	387
Part VIII. Maintenance Repair and Modernization of Lifting Magnets	390
Ch. I. Analysis of Structural Deficiencies and Damage in Basic Types of Lifting Magnets Used in Metallurgical Plants	390
Ch. II. Ways of Modernizing Existing Designs of Lifting Magnets	399
Ch. III. Repair Technology and Modernization of Lifting Magnets	404
Part IX. Inspection-Control and Testing Operations in Electrical Maintenance and Repair Work	422
Ch. I. Special Features of Control and Inspection Operations in Electrical Repair	422

Card 7/8

Maintenance and Repair of Electrical Equipment in Metallurgical (Cont.)	236
Ch. II. Sequence, Scope, and Norms of Defect Control Operations During Mechanical Checking and Testing	423
Ch. III. Electrical Checking and Testing	423
Ch. IV. Some Features in the Conduct of Control Operations Procedure in Repair of Large Electrical Machinery	466
Part X. Basic Information on Safety Engineering in Electrical Repair Work	469
Ch. I. General Rules on Safety and Fire Prevention During Electrical Repair Work	469
Ch. II. Basic Rules for Prevention of Electric Shock	470
Ch. III. Safety and Fire Prevention Measures During Impregnating and Drying Operations	471
Bibliography	472
Appendices	473
AVAILABLE: Library of Congress (TN677 .B3)	VK /ksv May 28, 1958
Card 3/8	

8(2,5)

PHASE I BOOK EXPLOITATION

SOV/2721

Bannov, Semen Yegorovich

Izgotovleniye zapasnykh chastey dlya elektrooborudovaniya metallurgicheskikh zavodov (Manufacturing Spare Parts for the Electrical Equipment of Metallurgical Plants) Moscow, Metallurgizdat, 1959. 243 p. Errata slip inserted. 4,000 ccpies printed.

Ed.: V. V. Fibikh; Ed. of Publishing House: T. I. Kiseleva;
Tech. Ed.: Ye. B. Vaynshteyn.

PURPOSE: This book is intended for technical personnel engaged in the repair of electrical equipment. It may also be useful to students in technical and trade schools specializing in electrical repair.

COVERAGE: The book deals with the organization and methods of manufacturing spare parts for electrical equipment of metallurgical plants. The manufacture of commutators, slip rings, types of windings, fuses, brush holders, magnetic cores, safety and

Card 1/8

Manufacturing Spare Parts (Cont.)

SOV/2721

arc-quenching devices, fasteners, and other parts used in the repair of electrical machinery and equipment are described. The book is based on industrial practices at electrical equipment repair shops and plants manufacturing electrical equipment and machinery. No personalities are mentioned. There are 5 references, all Soviet.

TABLE OF CONTENTS:

Preface	6
Introduction	7
Ch. I. Organization of the Production of Spare Parts	9
1. General information	9
2. Planning the manufacture of spare parts	10
3. Shops and equipment for manufacturing spare parts	12
Ch. II. Methods of Manufacturing Spare Parts	
Card 2/8	

Manufacturing Spare Parts (Cont.)

SOV/2721

	Securing the Interchangeability of Parts	14
1.	Forging	14
2.	Cutting	15
3.	Cold forming	17
4.	Rolling	21
5.	Drawing	24
6.	Cold upsetting	28
7.	Machining	29
8.	Benchwork	35
9.	Soldering and tinning	35
10.	Welding	41
11.	Power brushing	42
12.	Tumbling	43
13.	Extrusion of plastics	44
	a. Basic information	44
	b. Some characteristics of the manufacture of plastic parts	46
14.	Protective coatings: metal, paint, lacquers, and enamels	50

Card 3/8

Manufacturing Spare Parts (Cont.)

SOV/2721

15. Impregnating insulation	51
16. Securing the interchangeability of spare parts	55
Ch. III. Methods of Manufacturing Commutators and Slip Rings	61
A. Commutators	61
1. General information	61
2. Engineering requirements for commutators	63
3. List of principal operations	65
4. Manufacturing housings and fastening parts	65
5. Manufacturing insulating segments	72
7. Manufacturing micanite V-rings	72
8. Mounting commutator segments into a drum	80
9. Maching commutator drums	86
10. General assembly and baking of a commutator	87
11. Repeated pressing and dynamic shaping of a commutator	88
12. Special features of the manufacture and repair of small-size commutators	90

Card 4/8

Manufacturing Spare Parts (Cont.)

SOV/2721

B. Slip rings	91
13. General information	91
14. Manufacturing methods	92
15. Methods of insulating a hub	95
16. Assembling slip rings	97
Ch. IV. Manufacturing Windings for Electrical Equipment	100
1. General information	100
2. Methods of manufacturing 500-volt windings from insulated wire	100
3. Special features of manufacturing strip windings	120
4. Examples of methods for manufacturing windings for electrical equipment	123
Ch. V. Methods of Manufacturing Plastic Parts	128
1. General information	128
2. Dies, their construction and requirements	129
3. Methods of extruding phenol-aldehyde plastic parts	133
4. Methods of manufacturing asbestos-cement parts	137

Card 5/8

Manufacturing Spare Parts (Cont.)

SOV/2721

5. Manufacturing lacquer-impregnated asbestos parts	142
6. Manufacturing protective rubber sleeves	146
Ch. VI. Manufacturing Cartridge-type Fuses	148
1. General information	148
2. Methods of manufacturing fuses with plastic cartridges	150
3. Methods of manufacturing cartridges for types PR and PR-1 fuses	152
4. Manufacturing contact racks	156
Ch. VII. Manufacturing Brush Holders for Electrical Machinery	162
1. Constructions of brush holders and requirements	162
2. Methods of manufacturing stamped brush holders	165
3. Methods of manufacturing stamped and riveted brush holders	167
4. Methods of manufacturing cast brush holders	172
5. Manufacturing brush holders of other designs	174

Card 6/8

Manufacturing Spare Parts (Cont.)

SOV/2721

Ch. VIII.	Manufacturing Contacts and Contact Elements, Flexible Couplings, Springs, Shafts and Axles, Magnetic Cores, Safety and Arc-quenching Devices, Fasteners, and Other Parts for Electrical Equipment and Motors	175
1.	Contacts and contact elements	175
2.	Flexible couplings	191
3.	Contact holders	196
4.	Arc-quenching coils	198
5.	Contact and starter sleeves	201
6.	Shafts and axles for contactors. Starters and command apparatus	203
7.	Electrically insulated metallic parts	209
8.	Springs	217
9.	Contact bolts and pins	224
10.	Slip rings for power controllers	227
11.	D-c winding cores	228
12.	A-c winding cores	229
13.	Arcing horns and protective crowns	231

Card 7/8

Manufacturing Spare Parts (Cont.)	SOV/2721	
14. Fasteners		231
Bibliography		239
Appendix: List of Basic Equipment for Machine Shops of Electrical Repair Departments		240
AVAILABLE: Library of Congress (TS205.B27)		

Card 8/8

GO/mmh
1-18-60

BATNOV, Semen Yegorovich; FIBIKH, V.V., red.; YAKOVENKO, N.N., red.;
DOBUZHINSKAYA, L.V., tekhn. red.

[Repair of the electric equipment of metallurgical plants]
Remont elektrooborudovaniia metallurgicheskikh zavodov. Izd.2.,
perer. i dop. Moskva, Metallurgizdat, 1963. 527 p.

(MIRA 16:4)

(Metallurgical plants--Electric equipment)
(Electric machinery--Maintenance and repair)

BANNOVA, G.G.

Use of tick encephalitis viruses growing in tissue culture of chick
fibroblasts as an antigen in the complement fixation reaction. Vop.
virus. 6 no.2:151-156 Mr-Ap '61. (MIRA 14:6)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.
(ENCEPHALITIS) (COMPLEMENT FIXATION)

SARMANOVA, Ye.S.; IZOTOV, V.K.; PIVANOVA, G.P.; BANNOVA, G.G.; BYCHKOVA, M.V.

Hemagglutinating characteristics of Kemerovo virus. Vop. virus.
10 no. 6:663-669 N-D '65 (NIRA 19:1)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva. Submitted September 7, 1964.

L 25987-66 EWT(1)/T JK

ACC NR: AP6016098

(N)

SOURCE CODE: UR/0402/65/000/006/0663/0669

AUTHOR: Sarmanova, Ye. S.—Sarmanova, E. S.; Izotov, V. K.; Pivanova, G. P.;
Bannova, G. G.; Bychkova, M. V.

ORG: Institute of Poliomyelitis and Viral Encephalitis, AMN SSSR, Moscow (Institut
poliomyelita i virusnykh entsefalitov AMN SSSR)

TITLE: Hemagglutinating properties of Kemerovo virus

SOURCE: Voprosy virusologii, no. 6, 1965, 663-669

TOPIC TAGS: virus, encephalitis, antigen, mouse, serum

ABSTRACT: During the spring-summer season of 1962, periodic investigation of foci of tick-borne encephalitis in Kemerovskaya Oblast resulted in the isolation of a virus producing a cytopathic effect in cell cultures of chick embryos. Strains KM-3, No 17, 32, 35, 37 were isolated from Ixodes persulcatus ticks, and strain No 98 was isolated from the blood of a healthy man bitten by a tick. In this connection, the authors present the results of an investigation of the hemagglutinating properties of Kemerovo virus, as based on tests of cultures infected with the strains named above. Antigens prepared from Kemerovo virus-containing brain tissue of suckling mice by means of the techniques used to obtain arbovirus antigens failed to agglutinate goose erythrocytes in the presence of pH = 5.7-7.4. The allantoic

Card 1/2

UDC: 576.858.25.097.34

L 25987-66

ACC NR: AP6016098

fluid of virus-infected chick embryos displayed hemagglutinating activity for from 14 to 40 hours following infection. Hemagglutinating activity was also detected in the cultural medium of infected chick embryo tissue and continuous swine embryo kidney cultures. The hemagglutination titers of allantoic fluid were 1:128 to 1:2,048. The specificity of the hemagglutination reaction was proved by hemagglutination-inhibition reaction with sera of guinea pigs immunized with Kemerovo virus. (To eliminate nonspecific inhibitors, the sera were treated with a 25% kaolin suspension.) Thus it can be definitely established that the investigated strains of Kemerovo virus are closely interrelated and similar from the antigenic standpoint. Orig. art. has: 7 tables. [JPRS]

SUB CODE: 06 / SUEM DATE: 07Sep64 / ORIG REF: 002 / OTH REF: 001

Cord 2/2 *it*

BANNOVA, M.V.

Experiment in obtaining isophotos for the disc of Saturn.
Uch.zap.Len.un. no.153:155-157 '52, MLRA 8:6)
(Saturn(Planet)) (Astronomical photography)

BANNOVA, R.G.

Organization of competition for communist labor. Geod. i kart.
no.513-7 My '63. (MIRA 16:7)

(Cartography)

SHADRIKOV, I., brigadir molochnotovarnoy fermy; BANKOVA, T. pomoshchnik brigadira, chlen rabochego komiteta; TUMANDEYeva, L., profgruporg; KAYMAKINA, Ye., doyarka; ANTIPOVA, Yu., doyarka; PILOTCOVA, M., podsmennaya doyarka; ARKHANEYEV, B., skotnik; NURBULHAELOVA, R., telyatnitsa.

Disseminate the progressive practice among all state farm workers.
Sov. profsoiuzu 17 no. 5:12-14 Mr '61. (MIRA 14:2)

1. Sovkhoz "Kamash," Kuybyshevskoy oblasti.
(Kuybyshev Province--Dairying) (Socialist competition)

BANNOVA, Ye.A., aspirant

Hygienic and helminthological investigation of city ponds in Tashkent.
Med. zhur. Uzb. no.8:25-28 Ag '60. (MIRA 13:9)

1. Iz kafedry obshchey gigiyeny (zav. prof. - S.N. Babadzhanov)
Tashkentskogo gosudarstvennogo meditsinskogo instituta.
(TASHKENT—PONDS—BACTERIOLOGY)
(WORMS, INTESTINAL AND PARASITIC)

KOMPANTSEV, N.N., prof.; BABADZHANOV, S.N., prof.; KAMBULIN, N.A.,
dotsent; BANNOVA, Ye.A., assistant

Data for a study on the anthelmintic properties of some
plants in Uzbekistan. Med. zhur. Uzb. no.9:13-15 S '62.
(MIRA 17:2)

1. Iz kafedr farmakologii i obshchey gigiyeny Tashkentskogo
gosudarstvennogo meditsinskogo instituta.

KOMPANTSEV, N.N., prof.; BARADZHANOV, S.N., prof.; KAMBULIN, N.A., dotsent
KRYZHENKOV, A.N., dotsent; BANNOVA, Ye.A., assistent

Study of the anthelmintic properties of plants in Uzbekistan.
Med. zhur. Uzb. no.6:24-27 Je'63 (MIRA 17:3)

1. Iz kafedr farmakologii i obshchey gigiyeny Tashkentskogo
meditsinskogo instituta.

BANNYY, Nikolay Pavlovich; LEBEDEV, A.I., red.; PINEGIN, I.I., red.
~~1zd-vb; KARASEV, A.I., tekhn. red.~~

[Technical and economic calculations in ferrous metallurgy]
Tekhniko-ekonomicheskie raschety v chernoi metallurgii. Mo-
skva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1962. 380 p. (MIRA 15:2)
(Iron--Metallurgy) (Steel--Metallurgy)
(Steel industry--Accounting)

BANNYKH, A.M.

6

Influence of reducibility of self-fluxing sinter on blast furnace operations. A. M. Bannykh and A. G. Nevasov (Mining-Met. Inst., Magnitogorsk). Stal, 1955, No. 8, p. 10.

(1955).--Sinter used during 4 periods of furnace operation was made by using a different degree of fineness in lime grinding. In the first 85.7% limestone passed 0-3 mm. mesh, in the 2nd 95% of it was ground to the same size, in the next limestone and dolomite were combined and 95% of it passed this mesh, and finally the amt. of limestone added was selected to bring the sinter basicity to 1.25-1.3 in place of conventional 0.75-0.90. The self-fluxing effect was produced by holding the silicates in the sinter below the conventional concn. Finer grinding improved sinter characteristics as a burdening material, while addn. of dolomite increased its reducibility from 40.1 to 42.9. Using up to 80% sinter in the charge permitted the reduction of the limestone charge to 25% of the usual, increased furnace production by 13-16%, lowered coke consumption by 10-13%, raised blast temp. from 809 to 848°, and lead to more uniform operations. A clear picture of the effect of changes in the sinter characteristics presented by numerous figures is handicapped by the fact that high top pressure and other factors entered the general picture. J. D. G.

cl 224

ДАННИКН, А.М.

18(5)

PHASE I BOOK EXPLOITATION

SOV/1247

Dostizheniya domenshchikov Magnitogorskogo metallurgicheskogo kombinata
(Achievements of Blast Furnace Operators of the Magnitogorsk
Metallurgical Combine) Moscow, Metallurgizdat, 1957, 279 p.

Achievements of Blast Furnace Operators (Cont.) SOV/1247

Stefanovich, M.A.; Chapter I, part 1 by Dorogobid, G.M.; part 2 by Shitov, I.S.; part 3 by Yakobson, A.P.; Chapter II, part 1, 2, and 3 by Galatonov, A.L.; part 4 by Bannykh, A.M. and Nayasov, A.G.; Chapter III, Galatobov, A.L. and Golchin, V.I.; Chapter IV, parts 1,2,3,4,5 and 6 by Galatonov, A.L.; part 7 by Stefanovich, M.A.; Chapter V by Stefanovich, M.A.; Chapter VI by Babarykin, N.N.; Chapter VII by Shastin, V.A.; Chapter VIII by Gornostayev, V.K. There are 51 references, of which 43 are Soviet, and 8 are English.

TABLE OF CONTENTS:

Foreword

Introduction. 1. Brief description of a blast furnace	5
2. Results of technical and economic achievements of the blast furnace shop, 1950 to 1955	7
	8

Card 2/6

Achievements of Blast Furnace Operators (Cont.)	SOV/1247	
3. The nature of processes in a blast furnace		16
Ch. I. Preparation of Raw Material and Fuel for Blast Furnace Operation		
1. Method of coking		36
2. Blending of ore		36
3. Agglomerate plants and preparation of agglomerate		68
		79
Ch. II. Flux-bearing Agglomerate		
1. The use of flux-bearing agglomerate in the charge of a blast furnace		87
2. Quality of highly basic flux-bearing agglomerate		87
3. Results of blast furnace performance with flux-bearing agglomerate		91
4. Theoretical principles and reasons for using flux-bearing agglomerate		92
		97

Card 3/6

Achievements of Blast Furnace Operators (Cont.)	SOV/1247
Ch. III. Elimination of Manganese Additives from the Charge and the Production of Low Manganese Cast Iron	113
1. Productivity of the blast furnace and coke requirements	115
2. Quality of pig iron	117
3. Economic results	126
Ch. IV. Increased Pressure of Blast Furnace Gas	128
1. Application of increased top pressure	128
2. Plan for a changing over of blast furnaces to increased top pressure	129
3. Operation of blast furnaces with increased top pressure	134
4. Control and measuring instruments and their readings	137
5. Special features in the operation of blast furnaces with increased top pressure	140
6. Changes in the distribution of the charge materials in the stack	142
7. Theoretical principles of blast furnace operation with increased top pressure	146

Card 4/6

Achievements of Blast Furnace Operators (Cont.) SOV/1247

Ch. V.	Application of Blowing With Increased and Controlled Amounts of Moisture and Increased Heat (Temperature)	175
1.	The role of hydrogen and water vapors in blast furnaces	175
2.	Results of using blowing with variable amount of moisture	182
3.	Direction of changes in moisture content (from normal to optimum)	191
4.	The importance of high temperature blowing in relation to changes in the blast furnace processes	193
Ch. VI.	Controlling Blast Furnace Operations From the Top	210
1.	Analysis of motion and distribution of charge materials in the stack	212
2.	Characteristics of the basic principles in controlling blast furnace operations from the top	229
3.	The use of principles of controlling the blast furnace from the top for the elimination of certain troubles in the functioning of blast furnace	237

Card 5/6

Achievements of Blast Furnace Operators (Cont.) SOV/1247

Ch. VII. Constructional Improvements of Blast Furnace Shop Equipment

- | | |
|---------------------------------------------|-----|
| 1. Loading arrangement for blast furnaces | 248 |
| 2. Receiving hopper | 248 |
| 3. Hot air duct equipment | 250 |
| 4. Arrangement for removal of melt products | 255 |
| 5. Overhaul of blast furnaces | 261 |

Ch. VIII. The Role of the Blast Furnace Foreman

- | | |
|--------------------------------------------------------|-----|
| 1. The Magnitogorsk school for foremen | 266 |
| 2. Foreman -- a blast furnace technologist | 266 |
| 3. Foreman as the organizer of work at a blast furnace | 267 |
| 4. Uniform working methods for the various shifts | 274 |

AVAILABLE: Library of Congress

GO/ksv
3-10-59

Card 6/6

BANNYKH, A.M., prof.; BEZDENEZHNYKH, A.A., dots.; ZUTS, K.A., dots.

Scientific research carried out in 1957 at the Department of
Metallurgy of the Magnitogorsk Metallurgical Institute. Izv.vys. ucheb.
zav.; chern.met no.9:161-164 S '58. (MIRA 11:11)
(Magnitogorsk--Metallurgical research)

137-58-4-8660

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 334 (USSR)

AUTHORS: Bannykh, E.S., Sachko, A.P.

TITLE: An Accelerated Method of Inspection of Metallic Potassium for Potassium and Sodium Content (Uskorennaya metodika kontrolya metallichesкого калия na sodержaniye v nem калия i natriya)

PERIODICAL: Tr. Ural'skogo n.-i. khim. in-ta, 1957, Nr 4, pp 209-217

ABSTRACT: A method is suggested for the determination of Na in metallic K by means of the solidification temperature (ST) of the fused metal (M) and its total alkalinity (TA). 2-2.5 g M is taken from a moderate sample of K and placed in a special device filled with N. Then the M sample is dissolved in 96% alcohol and an aliquot portion is titrated with 0.25N HCl, thus determining the TA of the sample. To determine the ST, pieces of M are placed in a glass test tube 28-30 mm in diam and 18-20 cm long, which is lowered into a vaseline bath heated to $\sim 100^{\circ}\text{C}$. The M is heated to $75-80^{\circ}$ and, after the bath is removed, the ST of the M is read three times with a mercury thermometer, having a scale with 0.1-0.2 $^{\circ}$ graduations, while another thermometer is used to read the temperature of the portion of the scale projecting above

Card 1/2

137-58-4-8660

An Accelerated Method (cont.)

the M so as to make corrections in the reading of the first thermometer by means of the equation $\Delta = h(t - t_1)a$, where h is the number of degrees on the scale of the column of Hg projecting above the level of the M, t is the temperature to be measured, t_1 is the temperature in the middle of the measurement scale, and a is 0.00016. The experimental data have established the existence of a relationship between the ST of the M and the amount of Na present therein. This relationship is described by the equation $\%Na = 12.8 - 0.201t$, where t is the ST of the M. The K content is calculated from the difference between the TA and the Na contents, computed in terms of K. When the Na content is 1.5%, the accuracy of K determination is 0.1% absolute; when it is 4.5%, the accuracy is 0.2%. The analysis takes 1.5-2 hours.

Z.G.

1. Sodium--Determination
2. Potassium--Determination

Card 2/2

BANNYKH, N. S.

USSR/Inorganic Chemistry - Complex Compounds

C.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4083

Author : Bannykh, N. S., Vil'nyanskiy Ya. Ye.

Title : Contribution to the Study of Acid Sulfates of Potassium

Orig Pub : Zn. obshchey khimii, 1956, 26, No 4, 952-955

Abstract : $K_3H(SO_4)_2$ (I) was prepared by cooling an aqueous solution of K_2SO_4 (II) and H_2SO_4 (III) from 80° to

room temperature. In polarized light, the crystals of I showed strong double refraction; the refraction coefficients n_p and n_g are, respectively, 1.474 and 1.525. On heating in the range of $207-213^\circ$ one modification of I is converted to the other. Melting of I is incongruent; the melting point determined from thermal analysis data is of $268 \pm 3^\circ$. Melting of I takes place according to peritectic reaction type, involving the formation of crystalline II and of a liquid phase which the authors

Card 1/2

- 6 -

USSR/Inorganic Chemistry - Complex Compounds

C.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4083

consider to be a saturated solution of II in fused KHSO_4 . Beginning with 350° the solution undergoes decomposition with evolution of water vapor. By the method of optical analysis it was ascertained that on cooling of melts containing 67.22% II and 32.78% III, 68.31% II and 31.69% III or 69.09% and 30.91% III, crystals of I separate. From binary mixtures containing 69.85% II and 30.15% III or 71.44% II and 28.56% III, on cooling, II crystallizes out. The authors arrive at the conclusion that compounds X and Y, which have been reported previously (Kendall J., Landon, M.L., J. Amer. Chem. Soc., 1920, 42, 2131), are actually I and II, with a transformation point of I into II at 268° . On the basis of the results obtained, the authors have partially supplemented the solubility diagram of the II-III system.

Card 2/2

- 7 -

BANNYKH, N.S.

137-58-5-9345

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 78 (USSR)

AUTHORS: Bogachov, G.N., Bannykh, N.S., Popil'skiy, M.Ya.

TITLE: How Various Factors Affect the Oxidation of Chromic Oxide During Sintering of a Chromite Charge in Industrial Furnaces
(Vliyaniye razlichnykh faktorov na okisleniye okisi khroma pri spekanii khrcmitovoy shikhty v promyshlennykh pechakh)

PERIODICAL: Tr. Ural'skogo n.-i. khim. in-ta, 1957, Nr 4, pp 3-12

ABSTRACT: By investigating the operation of industrial tubular rotary furnaces employed for calcining of chromite with admixtures of soda and dolomite or lime it was established that, during calcining, the degree of oxidation of Cr_2O_3 to sodium chromate varies inversely with the content of Cr_2O_3 in the initial charge and the rate of loading of the latter into the furnace; this is apparently due to lumping of a part of the charge, a condition which prevents O_2 from reaching the Cr_2O_3 . Increasing the rate of rotation of the furnace has practically no effect on the degree of oxidation of Cr_2O_3 . The amount of soda added to the charge must correspond stoichiometrically to the fraction of Cr that is being oxidized to a chromate. To achieve maximum

Card 1/2

137-58-5-9345

How Various Factors Affect (cont.)

oxidation of Cr at any level of output of 40-mm long furnaces with an internal diameter of 1.6 m and an inclination of 6° and which employ powdered coal as fuel, it was found that the optimal Cr content in the charge amounts to approximately 16.5%.

Ye. Z.

1. Chronic oxide--Oxidation
2. Furnaces--Operation

Card 2/2

GUDTSOV, N.T. [deceased]; ZUDIN, I.F.; BANNYKH, O.A.

Some problems of alloying heat-resistant pearlitic steel. Issl. po
zharopr. splav. 3:23-33 '58. (MIRA 11:11)
(Steel alloys) (Heat-resistant alloys)

BANNYKH, O.A.; ZUDIN, I.F.

Effect of chromium on the durability of chromium-molybdenum steel.
Issl. po zharopr. splav. 3:384-387 '58. (MIRA 11:11)
(Chromium-molybdenum steel) (Metals at high temperature)

BANNYKH, O. A.

18(3); 18(5); 18(7)

PHASE I BOOK EXPLOITATION

SOV/3403

Gudtsov, Nikolay Timofeyevich; Oleg Aleksandrovich Bannykh; and Ivan Feofanovich Zudin

K voprosu o legirovani \bar{u} teploustoychivoy stali na osnove α -zheleza (The Problem of Alloying α -Iron Base Heat-Resistant Steel), Moscow, AN SSSR, 1959. 66 p. Errata slip inserted. 3,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii.

Resp. Ed.: I. A. Odintsov, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: P. F. Zolotov; Tech. Ed.: Yu. V. Rykova.

PURPOSE: This book is intended for metallurgists.

COVERAGE: The book deals with methods of increasing creep resistance of steel at elevated temperatures. The authors discuss high-temperature properties of ferrite alloys, the effect of various alloying elements, and stabilization of the carbide phase. Part of the material is based on the results of investigations conducted at the Laboratory of Metal Working of the Metallurgical Institute of the Academy of Sciences, USSR. No personalities are mentioned. There are 45 references, of which 22 are Soviet, 19 English, 3 German, and 1 is English.

Card 1/2

' The Problem of Alloying (Cont.)

SOV/3403

TABLE OF CONTENTS:

Introduction	3
Ways of Increasing Heat Resistance of Steel. Role of Structural Stability	5
Alloying and Properties of Ferrite at Elevated Temperatures	11
Tungsten and Molybdenum in Heat-Resistant Steel	31
Effect of Silicon on Heat Resistance	39
Chromium in Heat-Resistant Steel	44
Stabilization of the Carbide Phase and Heat Resistance	57
Bibliography	66

AVAILABLE: Library of Congress (TN700.G8)

Card 2/2

VK/mfd
4-26-60